

00211" 48806T60

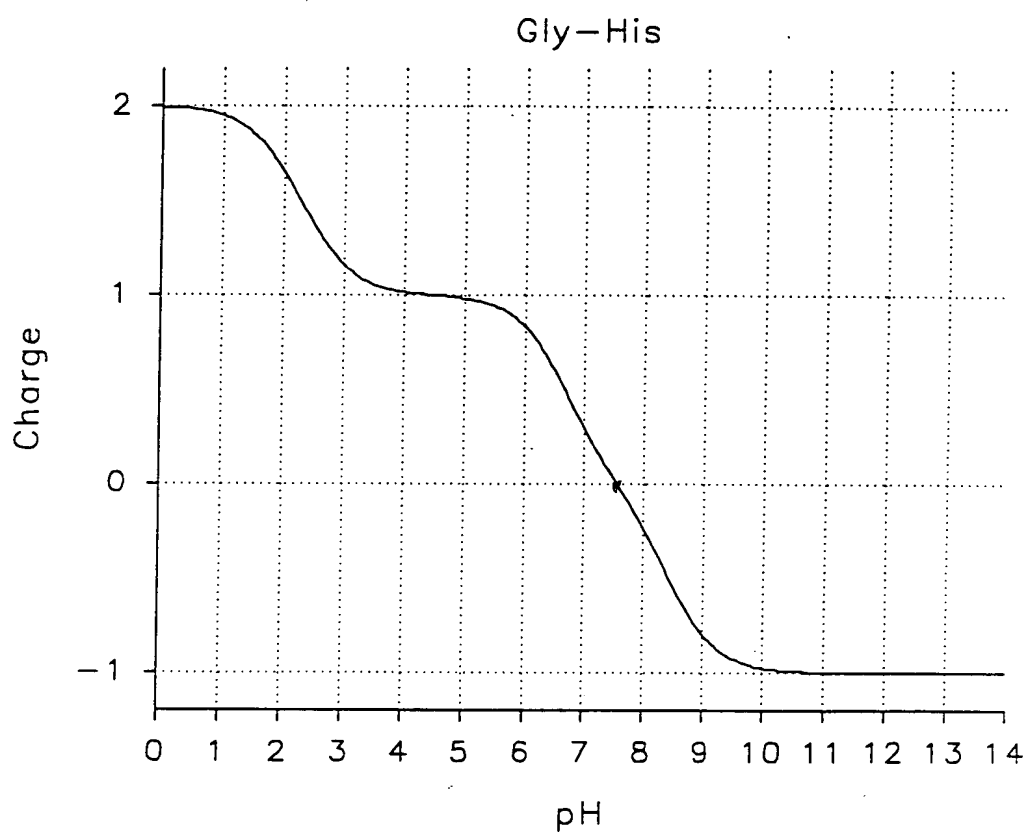


FIG. 1

00190887 11198

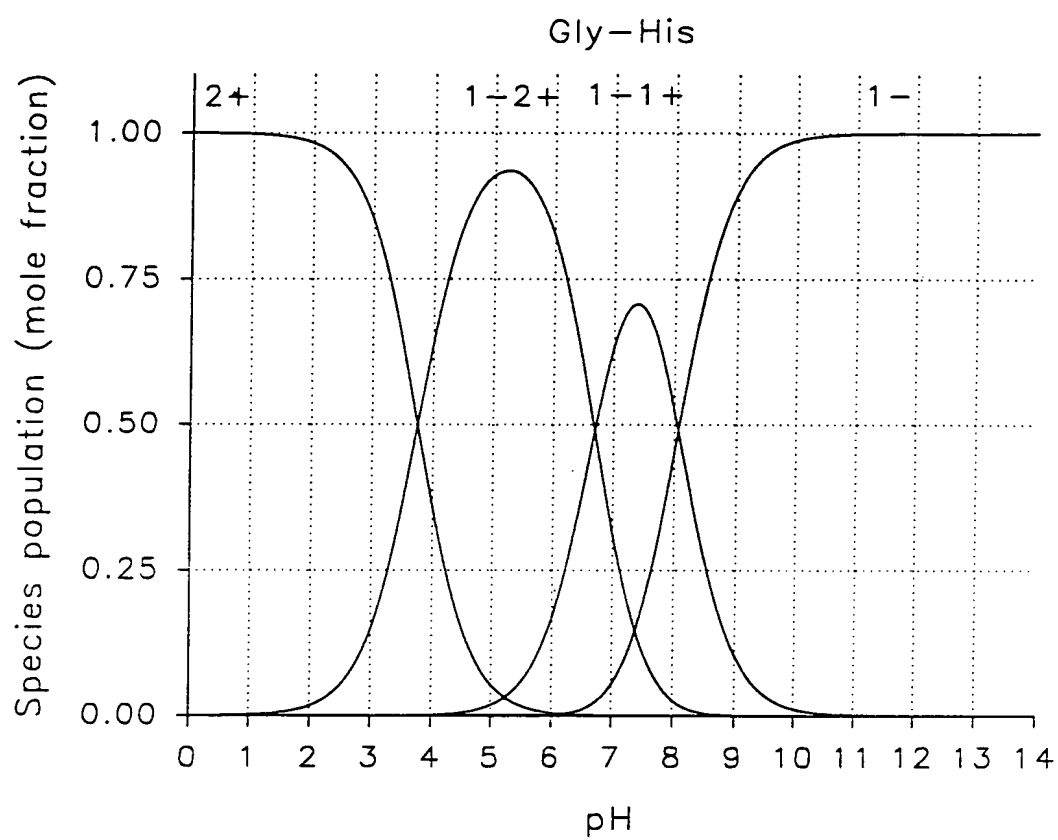


FIG. 2

0919088 111298

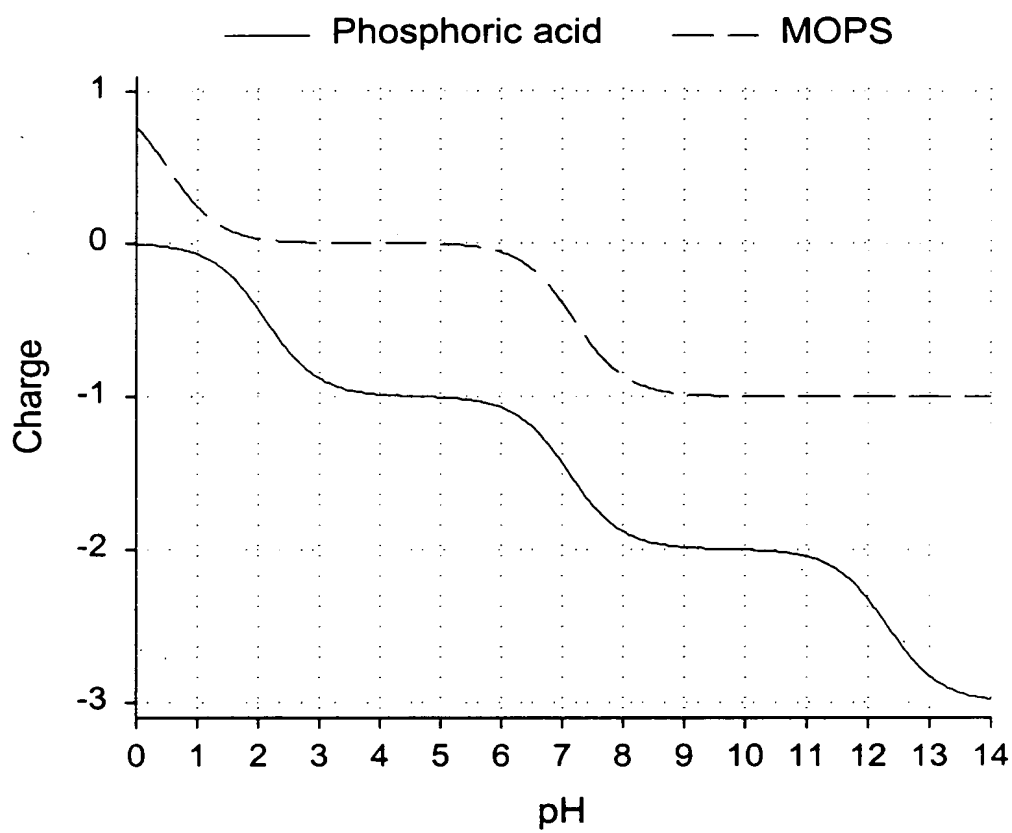


FIG. 3

36211" 2806T60

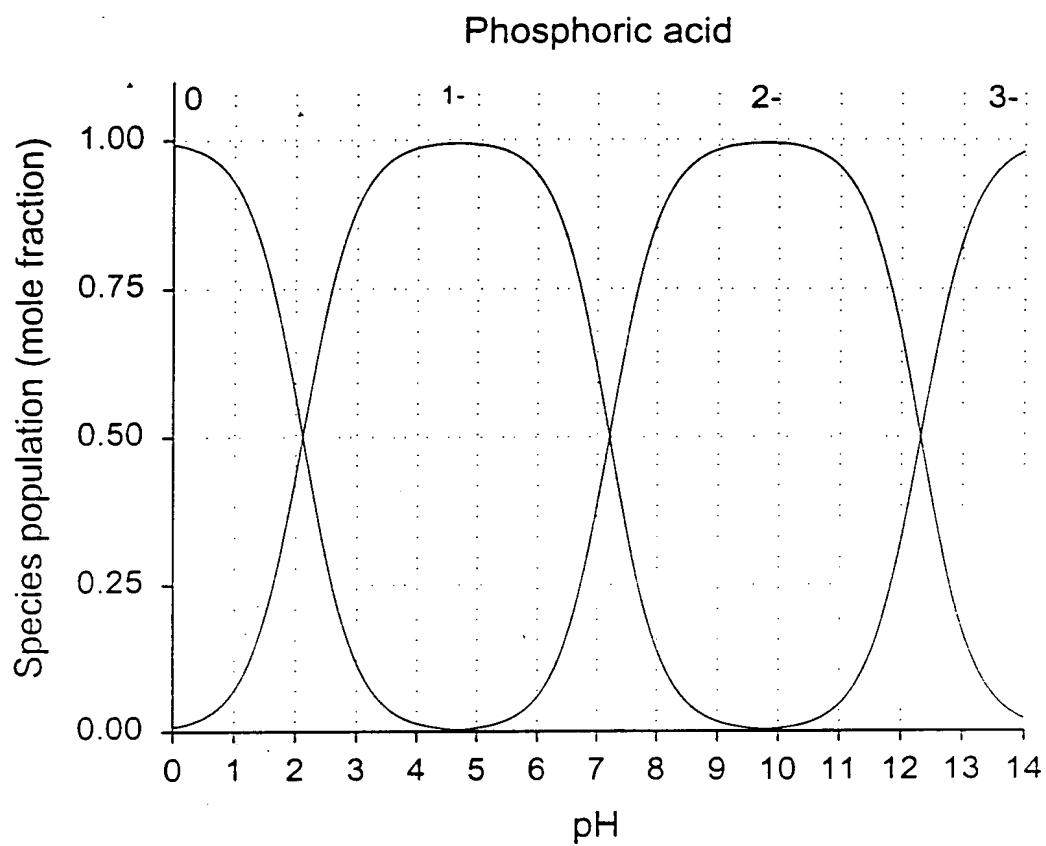


FIG. 4

862TT" 28806T60

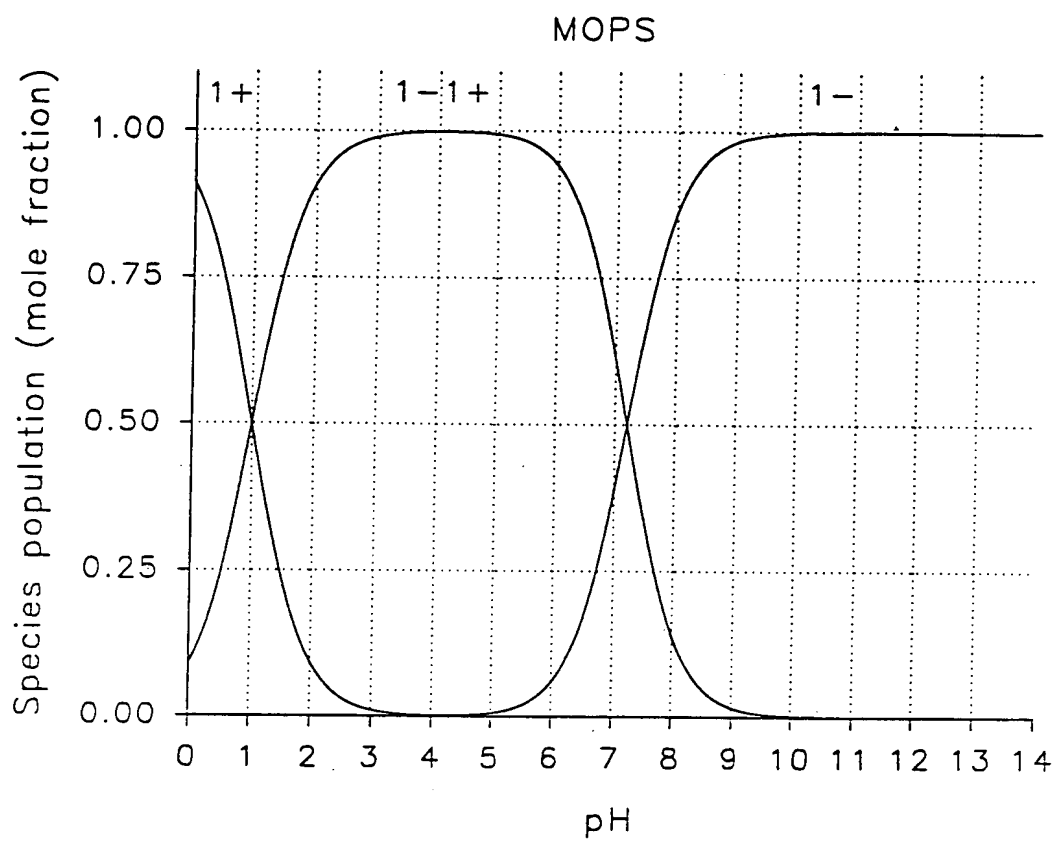


FIG. 5

652TT 4806T60

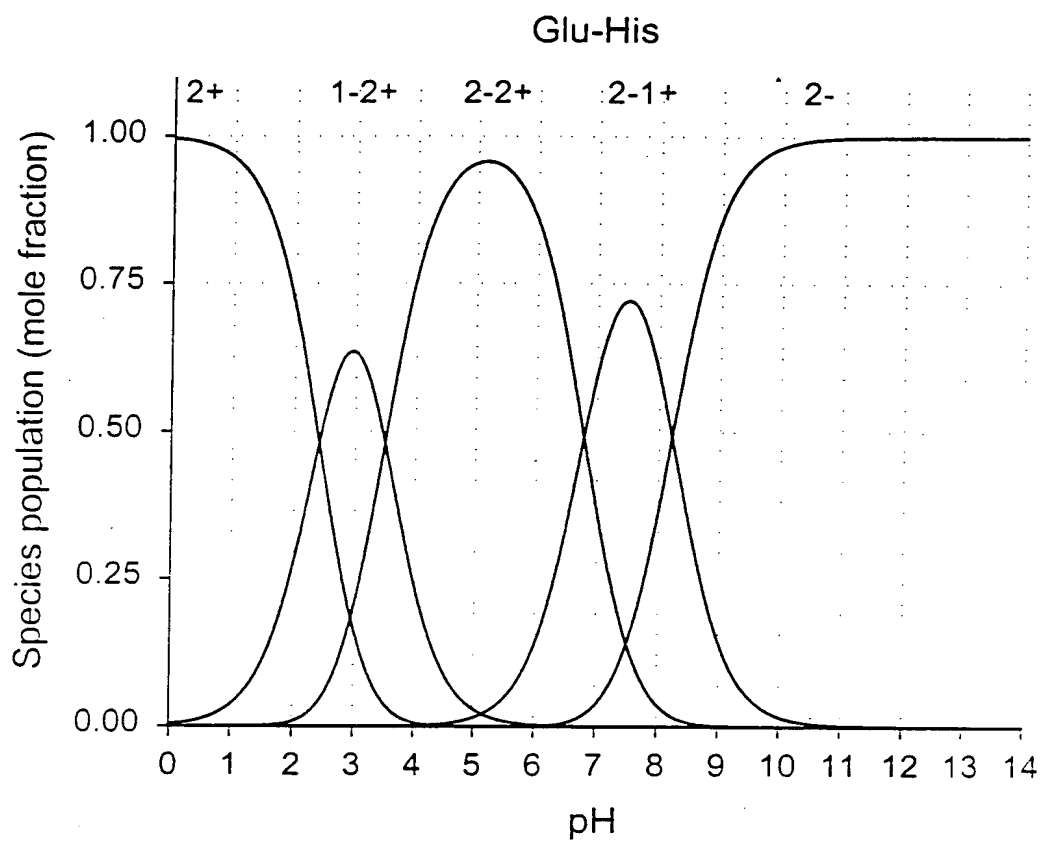


FIG. 6

His-Glu

Species population (mole fraction)

pH

2+ 1-2+ 2-2+ 2-1+ 2-

The graph shows the titration of His-Glu. The y-axis represents the species population (mole fraction) from 0.00 to 1.00. The x-axis represents pH from 0 to 14. Five curves represent different ionization states: 2+ (dominant at low pH), 1-2+ (first intermediate), 2-2+ (second intermediate), 2-1+ (third intermediate), and 2- (dominant at high pH). The curves intersect at pH values corresponding to the pKa's of the amino acid.

FIG. 7

FIG. 8

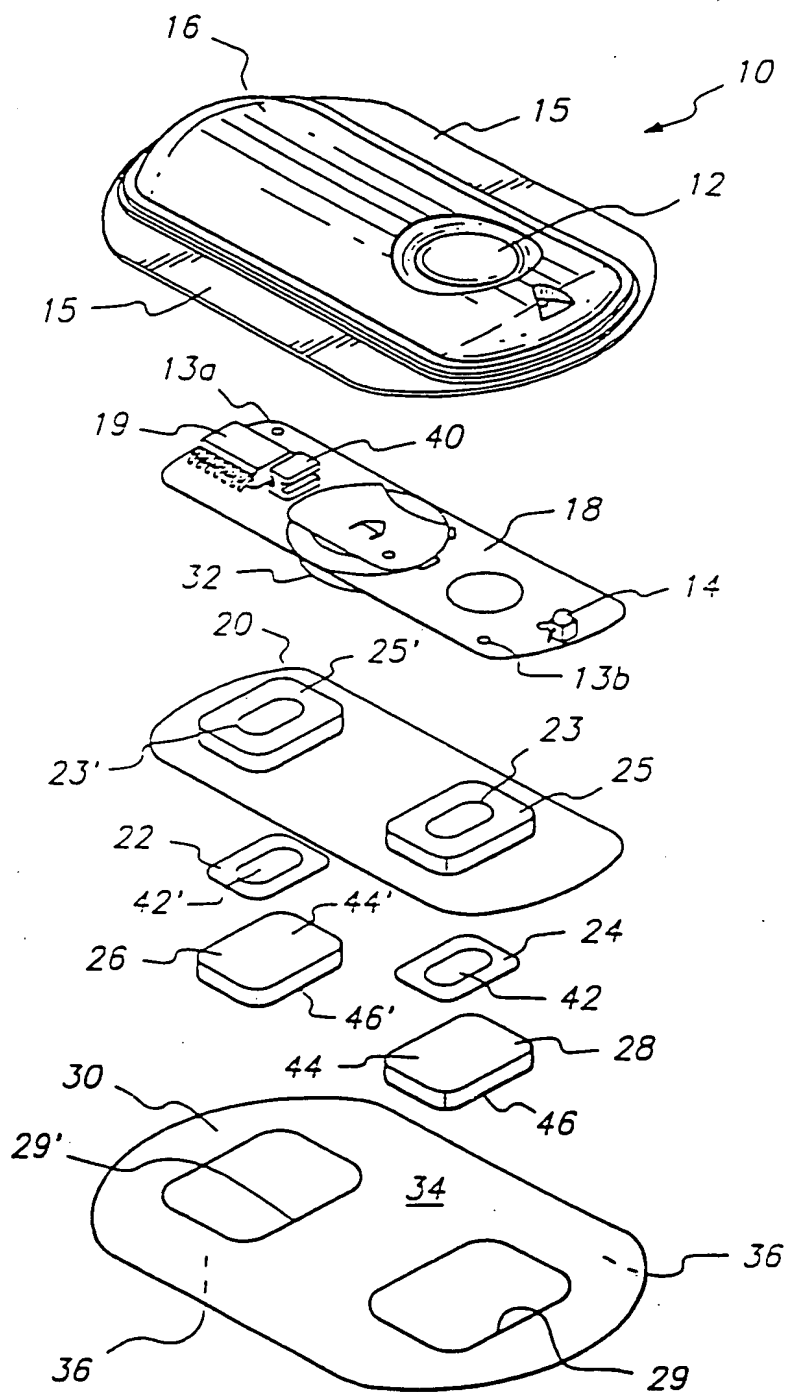




FIG. 9

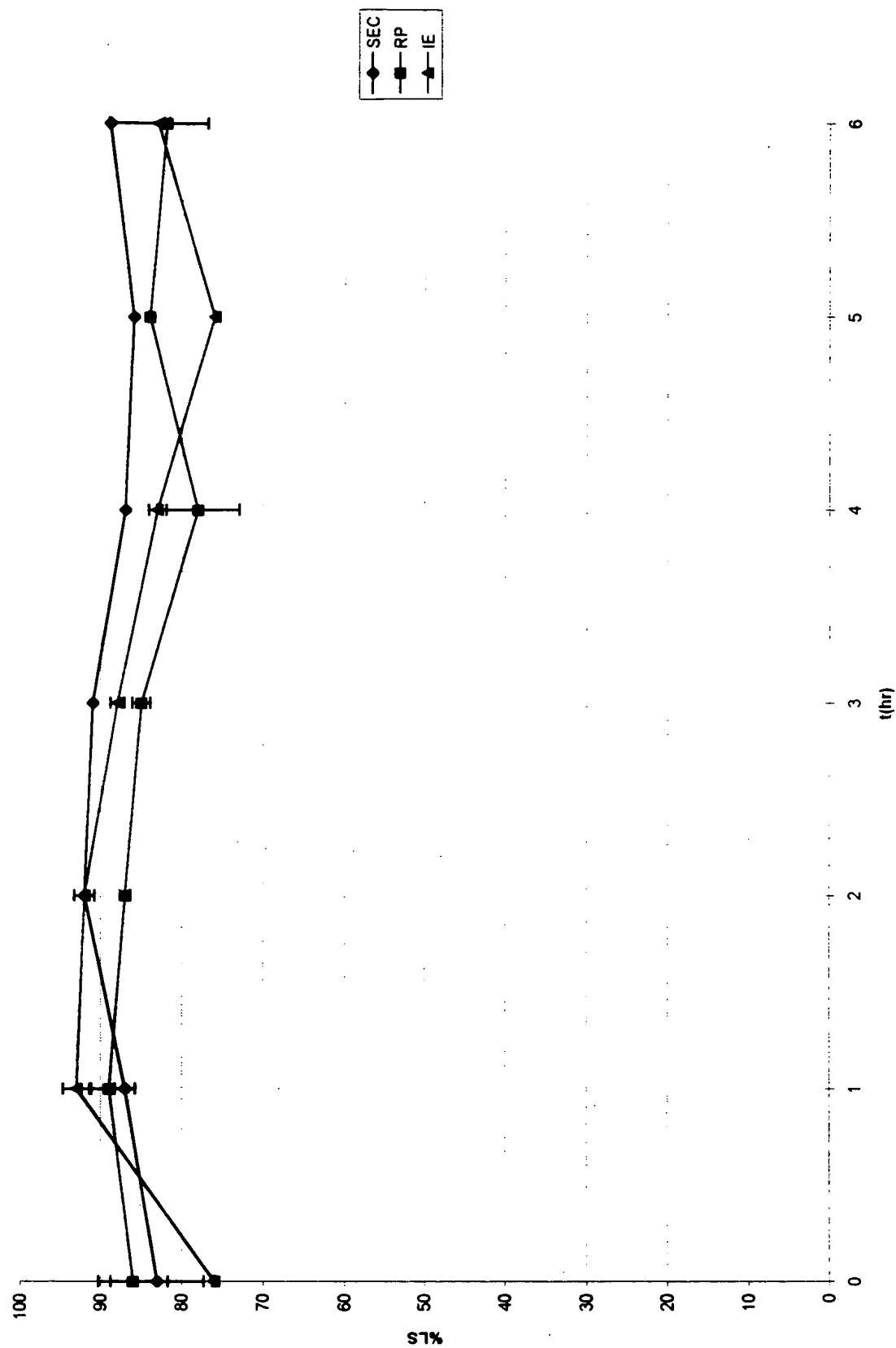
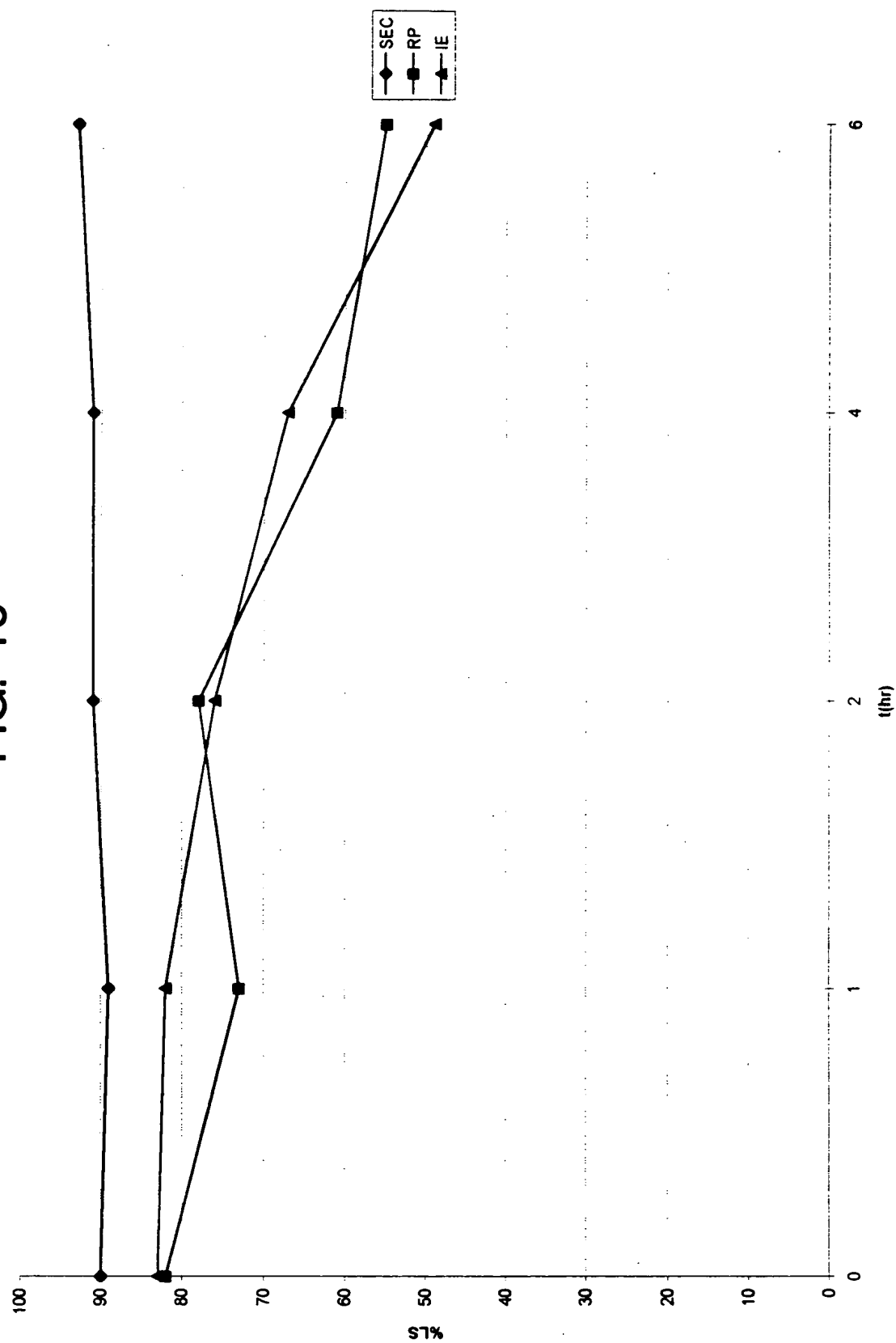


FIG. 10



06277" 28806T60

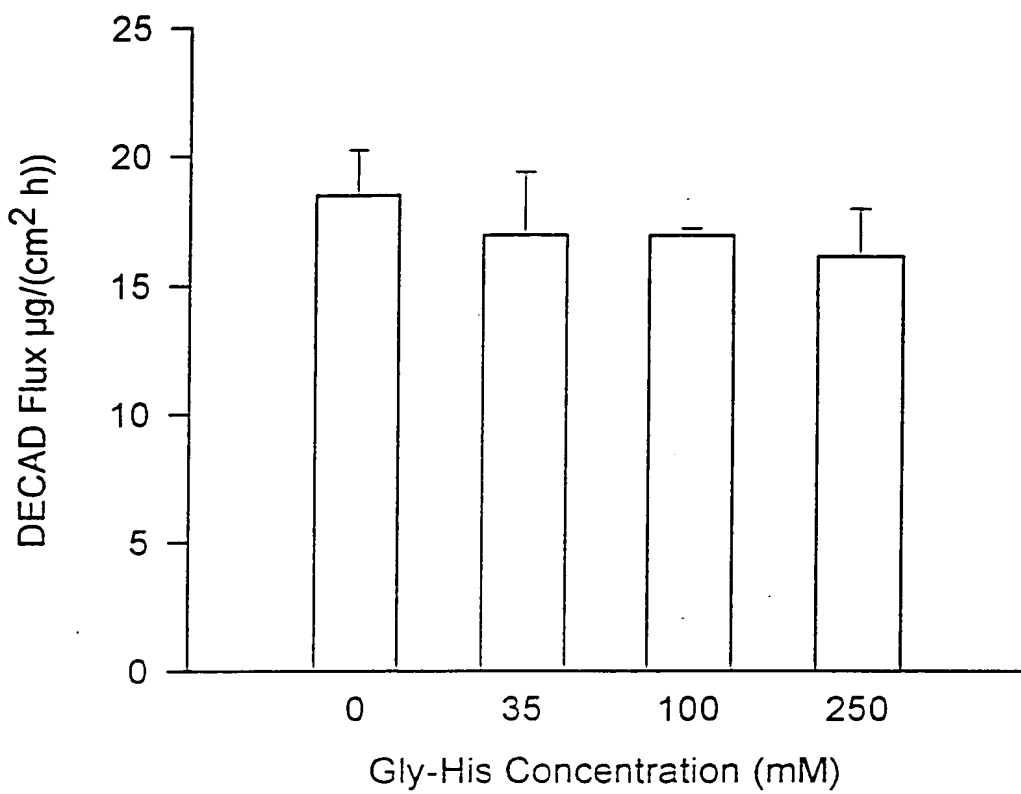


FIG. 11